

THE LEPTIDAE AND BOMBYLIDAE OF THE WHITE MOUNTAINS.

BY LEWIS E. HOOD, SOMERVILLE, MASS.

But few local lists of the Diptera have been published and until this order has been placed upon a higher basis by monographic study anything seems useful that will contribute to our knowledge of the geographical distribution of this neglected group of insects.

I have considerable material from the mountains of central New Hampshire and a list of the Leptidae and Bombylidae are given below; good series of several other families are in my possession especially in the Tabanidae, Asilidae, Empidae, and Trypetidae which I shall work up as time allows.

What knowledge I have of the dipterous fauna of the White Mt. region has been gained by the study of the insects collected during two trips between the years 1883 and 1887, and from several small lots of flies obtained from friends by exchange; supplementary to these personal collections I have had free access, through the kindness of Dr. H. A. Hagen, to the rich collections of Dr. H. Loew and Baron C. R. Osten Sacken in the Museum of comparative zoölogy in Cambridge, Mass., thereby not only being able to determine my species by direct comparison but becoming familiar with their series of New England Diptera.

There is a marked similarity between the dipterous fauna of the southern portion of the White Mountains,

and that of eastern Massachusetts, but the species obtained north of Mount Washington seem to be more local, with many that are common in Canada; the material from the mountain region is far too incomplete to warrant any definite conclusions as to distribution but I add to the list a few notes that have some bearing on this subject.

At no place did I find the Leptidae numerous, while certain species of Bombylidae were well represented by specimens; many are limited in their distribution with only one or two that could be considered cosmopolitan.

Most of my specimens were collected at North Conway, Bemis, Upper Bartlett, Glen Station, Mt. Washington, and the region around Jefferson.

FAMILY LEPTIDAE.

Triptotricha rufithorax Say. Upper Bartlett; before only recorded from N. Y. westward.

Chrysopila fasciata Say. North Conway, also at Hollis, N. H.

Chrysopila quadrata Say. North Conway, Bemis, N. H., eastern Massachusetts and throughout New England.

Chrysopila thoracica Fab. One specimen from near Mt. Lincoln; I am not certain of exact locality, and have specimens from Massachusetts and Maine.

Leptis hirta Loew. A specimen from the western part of the state

agrees in every respect with Dr. Loew's description but with slight, if it can be called any, facial swelling. Osten Sacken in his Catalogue gives Illinois as the habitat of this species. The present may be a new species but it is best to wait until other specimens are received before any special description is given.

Leptis mystacea Macq. Bemis and Jefferson, N. H., eastern Massachusetts, Norwich, Conn.

Leptis punctipennis Say. North Conway, Nashua. Osten Sacken states that this is common in the northern states, but it has not proved so in my collecting grounds.

Atherix variegata Walk. A single specimen from Jefferson collected in 1883.

FAMILY BOMBYLIDAE.

This family is better represented than the former, especially in the number of specimens. In his Catalogue Baron Osten Sacken gives the White Mountains and Maine as the habitat of *Exoprosopa dorcadion* O. S. in New England; I place the species in this list but as yet I have not received it from New Hampshire.

Exoprosopa dorcadion O. S.

Exoprosopa fascipennis Say. North Conway; and I have it from Connecticut.

Exoprosopa fasciata Macq. Jefferson, Bemis, Nashua; rather rare near Boston, Mass.

Anthrax lateralis Say. Single specimen near Bemis.

Anthrax nigricauda Loew. Jefferson; only a single specimen; have never found it before in New England.

Argyramoeba analis Say. Jefferson, N. H., Massachusetts, New Jersey, and in the collection of Mr. J. A. Wright a specimen labelled "North Carolina" received from Mr. Morrison.

Argyramoeba pluto Wied. "W. Mt"? I have a specimen marked "W. Mt." lately received with other species in exchange; it is possible this means "Western Montana" but I am led to believe that it is from the White Mountains.

Argyramoeba simson Fab. Single specimen from the western foothills of the White Mountains.

Bombylius fratellus Wied. North Conway.

Bombylius pygmaeus Fab. Jefferson.

Bombylius varius Fab. A single specimen much damaged, obtained near North Conway, I take to be this species, but the identification is not positive. Another species of this genus collected near Jefferson is still unidentified; it is closely allied to *B. atriceps* Loew, but much smaller.

Systropus macer Loew. Upper Bartlett.

Epibates fumestus O. S. In his Catalogue of American Diptera Osten Sacken gives the White Mountains as the habitat of this species. I have as yet never seen a specimen, and it is probably very rare.

Some species of this family were very common but it was quite another thing to catch them, they being approached with difficulty, seemingly more active than their brothers in the Bay state.

(Continued from page 274.)

des plantes at Paris, a ♀, and the Philadelphia type of the same at the Oxford museum, and from my notes and sketches taken at the time (1865-66) I can have no doubt that the two species are identical, an opinion first advanced by Burmeister (Germ. Zeitschr. ent., 2,54) and now generally held. Burmeister's description appeared at least a month before Serville's. That the Brazilian specimen mentioned by Serville belonged to a different species is probable both from its geographical separation and because Serville mentions that the inside of the hind femora is of a deep blue, which might have been taken from the Brazilian specimen but is not true of the North American species.

This is a characteristic species of the southern United States, where it extends everywhere from Florida to Texas, and ranges as far north as Maryland, Pennsylvania (Serville), and New Jersey in the east, Illinois as far north as Union County (Thomas) or Rock Island County (McNeill) where it is rare, and in the west to Nebraska. I have specimens before me from various parts of Florida, Dallas, Tex., Georgia, North Carolina, Virginia, Maryland, New Jersey, and Nebraska.

HIPPISCUS (H.) PANTHERINUS sp. nov.

Pale ochraceous, the head strongly tinged with pale yellow, full and well rounded, only moderately broad above; vertex transversely scabrous behind the scutellum which

is broader than long, with distinct and somewhat elevated, though smoothly rounded bounding walls which rapidly converge on the sides anteriorly, its front terminated by a transverse and deep foveolate sulcus separating its body from the frontal costa; posteriorly the bounding wall is slight and a feeble longitudinal carina passes through its posterior half, the floor nearly smooth; lateral foveolae small, subrhomboid, distinct; frontal costa rather deeply sulcate except at extremities. Antennae fuscous, paler at base. Pronotum not very stout, the posterior lobe less expanded than usual, the median carina impressed rather than cut by the anterior sulcus, and the effect heightened by its partial suppression immediately behind said sulcus and the formation of a slight discal scutellum; surface rugose but not prominently nor densely, the lateral canthi moderately sharp and traversing the principal sulcus; color ochraceous with a pale yellow oblique stripe on either side of the metazona, broad anteriorly and narrow posteriorly, giving the metazona the appearance of a greater expansion than it has. Tegmina dark fuscous with strongly pantherine, transverse, pallid or yellowish stripes which become narrower and fainter in the semipellucid apex; in all cases they are continuous, subequal, and traverse the whole or nearly the whole of the tegmina outside the axillary area which is fuscous except for one or two partial bands adjoining those of the area above but separated from them by the clear pale yellow sutural stripe; an oblique pallid discal stripe follows the descending portion of the ulnar vein connecting the transverse stripes at either end; darker spots of the marginal field blackish fuscous and conspicuous especially in middle of tegmina. Wings pale lemon-yellow at base with a rather broad dark fuscous stripe hardly narrowing in the upper part of the anal field, but narrowing with great regularity to the anal angle which it reaches, leaving four lobes of the margin intact; separated by a